



10/660,253

2-6-06

DAC *gfw*

Docket No.: 03988/100K297-US **D**  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Letters Patent of:  
Mark Aaron Behlke et al.

Patent No.: 6,889,143

Issued: May 3, 2005

For: METHODS AND SYSTEMS FOR  
ESTIMATING THE MELTING  
TEMPERATURE (TM) FOR  
POLYNUCLEOTIDE MOLECULES

**PETITION (37 CFR 1.183) AND REQUEST FOR CERTIFICATE OF CORRECTION OF  
APPLICANT MISTAKE (37 CFR 1.323)  
AND PATENT OFFICE MISTAKE (37 CFR 1.322)**

Attention: Certificate of Correction Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Enclosed is:

- (1) Copy of the PTOL-85B filed for this application at Tab A;
- (2) Copy of the Notice of Recordation of Assignment Document at Tab B;
- (3) Six Certificates of Correction (Forms PTO/SB/44) at Tab C;
- (4) Fee set forth in 37 CFR 1.20(a) of \$130.00; and
- (5) Petition fee set forth in 37 CFR 1.17(h) of \$100.00.

02/08/2006 SHASSEN1 00000032 6889143

01 FC:1811	100.00 OP
02 FC:1464	130.00 OP

The above-identified patent contains an error that arose from an erroneous assignee address furnished in item 3 of PTOL-85B (Tab A) filed for this application. Failure to include the correct assignee address on the PTOL-85B was inadvertent. The error is of a clerical or typographical nature ("Indiana" instead of the correct "Iowa"), the correction of which does not constitute new matter or require reexamination. The Recordation of the Assignment with the corrected address is at Tab B.

Patentee respectfully requests that the Commissioner waive the requirements of 37 CFR 3.81 to permit the correct name of the assignee to be provided after issuance of the patent.

Upon reviewing the above-identified patent, Patentee also noted that the figures were omitted when the patent published. The figures were originally filed with the application. Therefore, omission of the figures was not the fault of the Patentee, and no fee is therefore due.

In the figures please insert:

-- Fig. 1A --.

-- Fig. 1B --.

-- Fig. 2 --.

-- Fig. 3. --.

-- Fig. 4. --.

Please find the Certificates of Corrections at Tab C for the corrected address and omitted figures.

The Commissioner is authorized to charge any deficiency of up to \$300.00 or credit any excess in this fee to Deposit Account No. 04-0100.

Applicant respectfully requests that the petition be granted and that the appropriate  
Certificates of Correction be issued.

Dated: February 2, 2006

Respectfully submitted,

By 

Flynn Barrison

Registration No.: 53,970

DARBY & DARBY P.C.

P.O. Box 5257

New York, New York 10150-5257

(212) 527-7719

(212) 527-7701 (Fax)

Attorneys/Agents For Applicant

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

Page 1 of 6

PATENT NO. : 6,889,143  
APPLICATION NO. : 10/660,253  
ISSUE DATE : May 3, 2005  
INVENTOR(S) : Mark Aaron Behlke et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**In the Assignee:**

**Please delete "Intergrated DNA Technologies, Inc., Coralville, IN" and substitute  
-- Integrated DNA Technologies, Inc., Coralville IA --.**

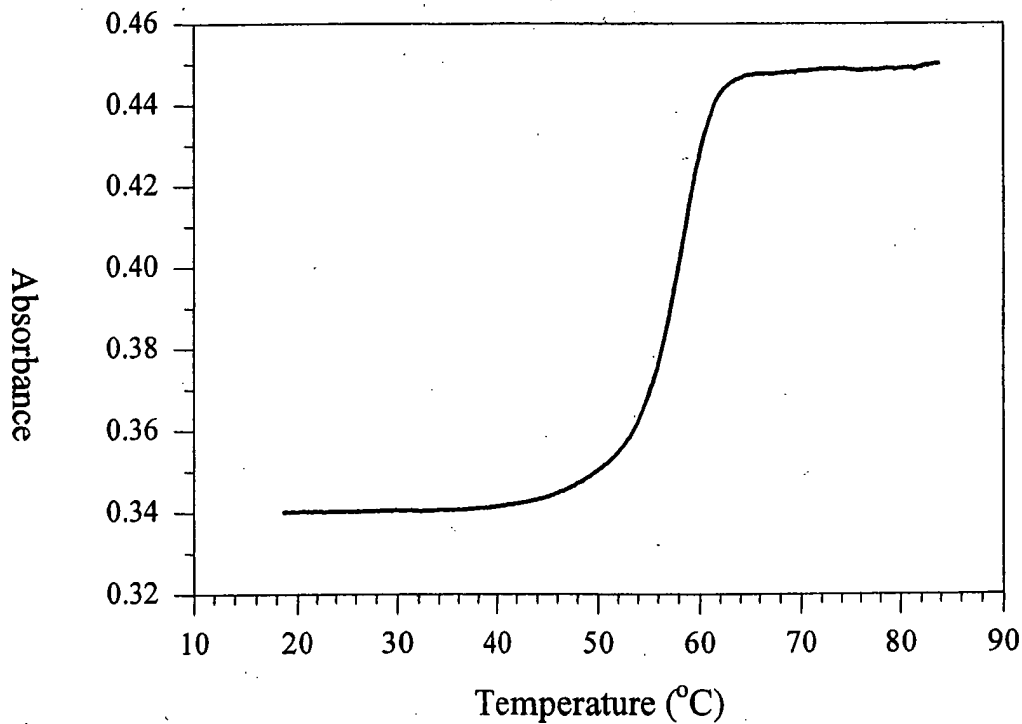
MAILING ADDRESS OF SENDER:  
Flynn Barrison  
DARBY & DARBY P.C.  
P.O. Box 5257  
New York, New York 10150-5257

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

Page 2 of 6

PATENT NO. : 6,889,143  
APPLICATION NO. : 10/660,253  
ISSUE DATE : May 3, 2005  
INVENTOR(S) : Mark Aaron Behlke et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:



**FIG. 1A**

MAILING ADDRESS OF SENDER:  
Flynn Barrison  
DARBY & DARBY P.C.  
P.O. Box 5257  
New York, New York 10150-5257

UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION

Page 3 of 6

PATENT NO. : 6,889,143  
APPLICATION NO. : 10/660,253  
ISSUE DATE : May 3, 2005  
INVENTOR(S) : Mark Aaron Behlke et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

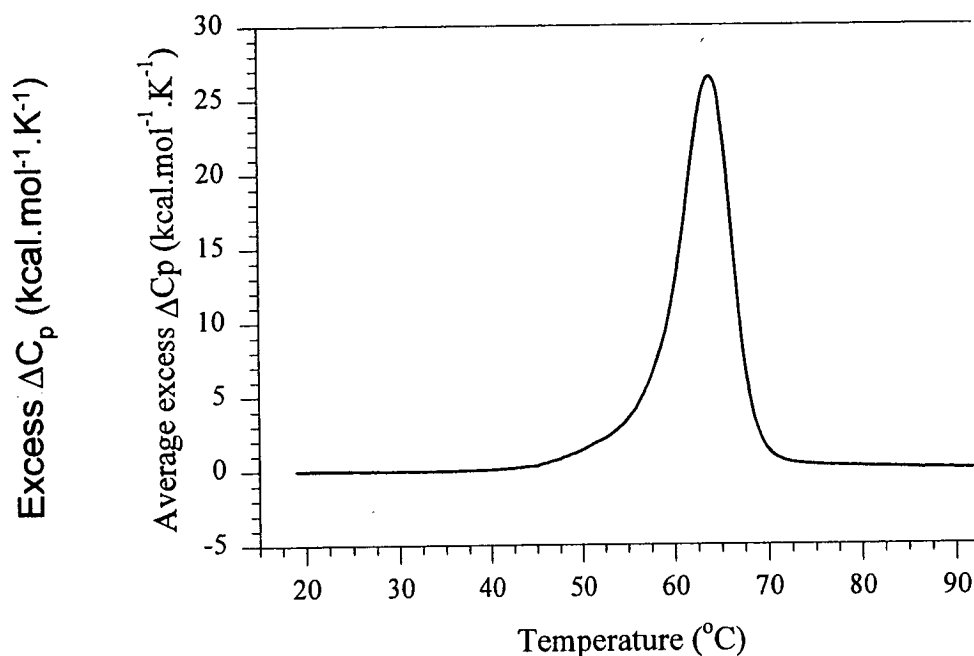


FIG. 1B

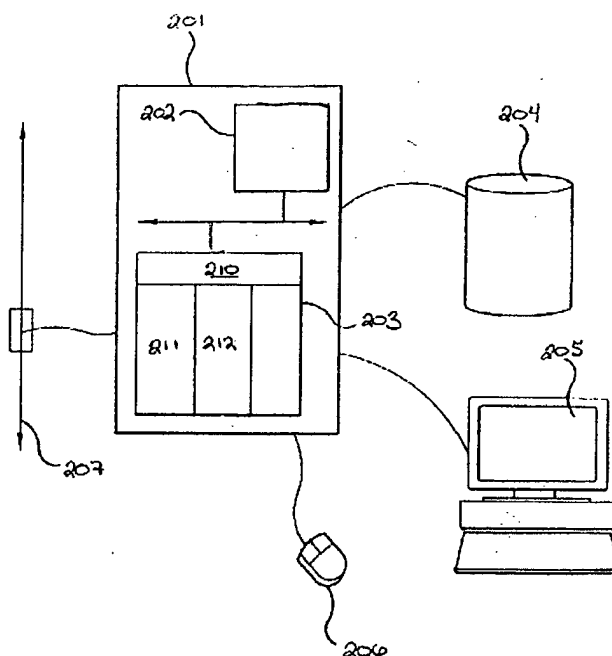
MAILING ADDRESS OF SENDER:  
Flynn Barrison  
DARBY & DARBY P.C.  
P.O. Box 5257  
New York, New York 10150-5257

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 4 of 6

PATENT NO. : 6,889,143  
APPLICATION NO. : 10/660,253  
ISSUE DATE : May 3, 2005  
INVENTOR(S) : Mark Aaron Behlke et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:



**FIG. 2**

MAILING ADDRESS OF SENDER:  
Flynn Barrison  
DARBY & DARBY P.C.  
P.O. Box 5257  
New York, New York 10150-5257

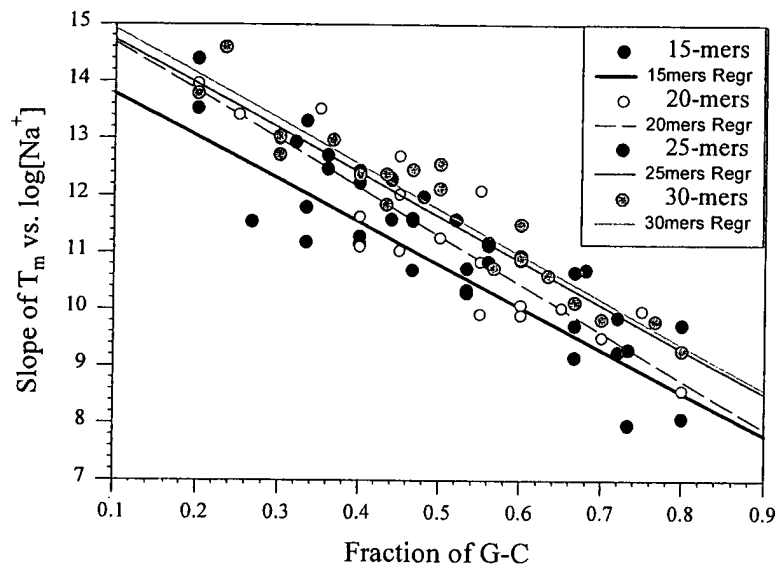
## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 5 of 6

PATENT NO. : 6,889,143  
 APPLICATION NO. : 10/660,253  
 ISSUE DATE : May 3, 2005  
 INVENTOR(S) : Mark Aaron Behlke et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Slope of ( $T_m$  vs.  $\log[Na^+]$ ) plotted against fraction of G-C base pairs.



**FIG. 3**

MAILING ADDRESS OF SENDER:  
 Flynn Barrison  
 DARBY & DARBY P.C.  
 P.O. Box 5257  
 New York, New York 10150-5257



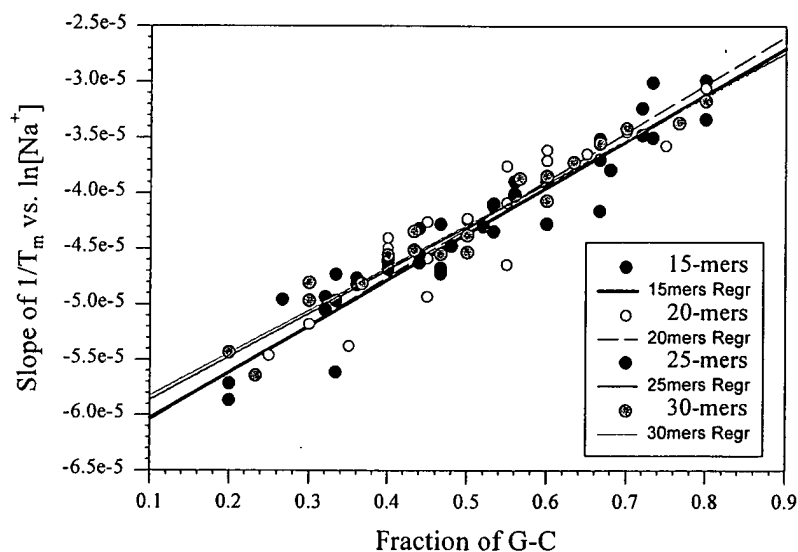
## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 6 of 6

PATENT NO. : 6,889,143  
 APPLICATION NO. : 10/660,253  
 ISSUE DATE : May 3, 2005  
 INVENTOR(S) : Mark Aaron Behlke et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Slope of  $(1/T_m \text{ vs. } \ln[\text{Na}^+])$  plotted against fraction of G-C base pairs.



**FIG. 4**

MAILING ADDRESS OF SENDER:  
 Flynn Barrison  
 DARBY & DARBY P.C.  
 P.O. Box 5257  
 New York, New York 10150-5257

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
or Fax (703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 4 by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

7590 12/03/2004  
DARBY & DARBY P.C.  
P.O. Box 5257  
New York, NY 10022-5257

EXPRESS MAIL CERTIFICATE

Date 1/31/05 Label No. 329022270-US  
I hereby certify that, on the date indicated above, this paper or fee was deposited with the U.S. Postal Service & that it was addressed for delivery to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 by Express Mail Post Office to Addressee's service.

B.W. LEE B.W. Lee  
Name (Print) Signature

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (703) 746-4000, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,253	09/11/2003	Mark Aaron Behlke	03988/100K297-US1	5351

TITLE OF INVENTION: METHODS AND SYSTEMS FOR ESTIMATING THE MELTING TEMPERATURE (TM) FOR POLYNUCLEOTIDE MOLECULES  
02/04/2005 JBALINA2 00000114 10660253

01 FC:2501 700.00 OP

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$685	\$300	\$985	03/03/2005

EXAMINER	ART UNIT	CLASS-SUBCLASS
MARTINELL, JAMES	1631	702-019000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Darby & Darby  
2  
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) Rec. 2/3/04 R/F: 014956/0599

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Intergrated DNA Technologies, Inc. Coralville, Indiana

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

- ☒ Issue Fee  
☒ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies

4b. Payment of Fee(s):

- ☒ A check in the amount of the fee(s) is enclosed. \$1000.00  
☐ Payment by credit card. Form PTO-2038 is attached.  
☒ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number 04-0100 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature

Samuel S. Woodley

Date

January 31, 2005

Typed or printed name

Samuel S. Woodley

Registration No.

43,287

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



**UNITED STATES PATENT AND TRADEMARK OFFICE**

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

DECEMBER 08, 2005

PTAS

**\*700216710A\***

PAUL F. FEHLNER, PH.D.  
DARBY & DARBY P.C.  
P.O. BOX 5257  
NEW YORK, NY 10150-5257

**\*700216710A\***

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT SERVICES DIVISION, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 10/11/2005

REEL/FRAME: 016866/0820

NUMBER OF PAGES: 4

BRIEF: CORRECTIVE ASSIGNMENT TO CORRECT THE STATE OF THE RECEIVING  
PARTY PREVIOUSLY RECORDED ON REEL 014956 FRAME 0599  
DOCKET NUMBER: 03988/100K297-US1

ASSIGNOR:

BEHLKE, MARK A.

DOC DATE: 01/16/2004

ASSIGNOR:

HUANG, LINGYAN

DOC DATE: 01/15/2004

ASSIGNOR:

OWCZARZY, RICHARD

DOC DATE: 01/15/2004

ASSIGNOR:

WALDER, JOSEPH A.

DOC DATE: 01/15/2004

016866/0820 PAGE 2

ASSIGNEE:

INTEGRATED DNA TECHNOLOGIES, INC.  
1710 COMMERICAL PARK  
CORALVILLE, IOWA 52241

SERIAL NUMBER: 10660253

FILING DATE: 09/11/2003

PATENT NUMBER: 6889143

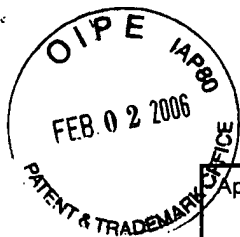
ISSUE DATE: 05/03/2005

TITLE: METHODS AND SYSTEMS FOR ESTIMATING THE MELTING TEMPERATURE (TM) FOR  
POLYNUCLEOTIDE MOLECULES

LAZENA MARTIN, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

CH 8:10 00 040:100 10660263

HW:103988\100K297US\100545203.DOC 10/20/2001 10:05:45 AM



Application No. (if known): 10/660,253

Attorney Docket No.: 03988/100K297-US0

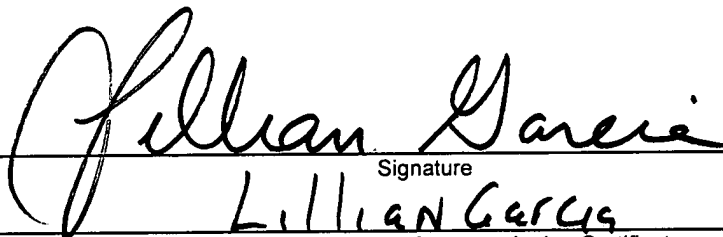
## Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. \_\_\_\_\_ in an envelope addressed to:

**EV762806113-US**

Attention: Certificate of Correction Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on February 2, 2006  
Date

  
\_\_\_\_\_  
Signature

LILLIAN GARCIA  
Typed or printed name of person signing Certificate

\_\_\_\_\_  
Registration Number, if applicable

\_\_\_\_\_  
Telephone Number

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Certificate of Correction (6 pages)  
Petition (37 Cfr 1.183) And Request For Certificate Of Correction Of  
Applicant's Mistake (37 Cfr 1.323) And (37 CFR 1.322) (3 pages)  
Copy of Notice of Recordation (3 pages)  
Copy of Notice of Allowability (1 page)  
Check for \$230.00 11105  
Return Postcard